CLAIMS

1. An auger flight support for supporting a plurality of auger flights by connecting together respective first ends of parallel auger flights, the auger flights each having a respective helical flighting affixed exteriorly therearound and having a respective outer diameter and respective second ends having a drive socket, the auger flights being adapted for use with an augering apparatus of the type used for rotating and advancing a plurality of side-by-side cutting heads of the drilling section, the drilling section which is driven horizontally into the side of the hill with the cutting heads driven rotationally through the drive sockets by the augering apparatus, the unitized auger flights being inserted between the drilling section and the augering apparatus in a rotationally coupled end-to-end manner as drilling progresses, the auger flight support comprising:

a pair of bearing housings;

a pair of drive shafts each having a first end adapted to closely fit within and be affixable to the first end portion of a respective flight auger, a second end portion of mating configuration to the drive sockets, and a middle bearing portion which fits within said bearing housing

at least one bearing disposed within each of said bearing housings between the respective bearing housing and said bearing portion of the respective said drive shaft, said at least one bearing which rotationally supports and longitudinally retains the respective drive shaft to the bearing housing;

a tie bar interconnecting said bearing housings at such a spacing that the respective of said outer boring diameters of said flightings are closely adjacent one another;

a support leg extending downwardly from said tie bar; said leg being adapted to engage the surface of the ground lying between said parallel auger flights.

2. An auger flight support as defined in claim 1, wherein the support leg lies substantially equidistant from each of the auger flights of the parallel auger flights.

3. An auger flight support as defined in claim 1, wherein said support leg is disposed at approximately midway along the length of said tie bar.

4. An auger flight support as defined in claim 3, wherein said tie bar includes a downwardly depending leg mounting block disposed approximately midway along the length of said tie bar and said support leg is secured to said mounting block.

5. An auger flight support as defined in claim 4, wherein said support leg is releasably secured to said mounting block.

6. An auger flight support as defined in claim 5, wherein said support leg is secured to the mounting block by a nut and bolt.

7. An auger flight support as defined in claim 1, wherein said support leg is integrally formed with said tie bar.

8. An auger flight support as defined in claim 1, wherein said support leg is disposed on said tie bar at such a position that allows said support leg to lie at substantially the center of gravity of the parallel auger flights.

9. An auger flight support as defined in claim 1, wherein said support leg is adapted to contact the raised ledge of ground formed between the counter rotating parallel auger flights.

10. An auger flight support as defined in claim 9, wherein said support leg further includes a foot plate and the foot plate is adapted to contact the ledge of the ground between the auger flights.

11. An auger flight support as defined in claim 9, wherein the width of the foot plate is greater than the width of the support leg.

12. An auger flight support as defined in claim 9, wherein said support leg is shorter in length than the diameter of the auger flights.

13. An auger flight support as defined in claim 1, wherein said support leg is substantially parallel in an assembled position to the auger flights.

14. An auger flight support for a plurality of augers, each of the augers including a plurality of axially adjacent auger flights, wherein said auger flight support comprises:

a bearing housing disposed at a position along the length of each auger, each bearing housing connecting axially adjacent auger flights together;

a tie bar connecting the bearing housings of adjacent parallel augers together;

a support leg extending downwardly from the mid-section of said tie bar, said support leg being adapted to engage the ground surface lying between the adjacent parallel augers and to substantially keep the augers from resting on the ground surface.

15. An auger flight support as defined in claim 14, wherein the support leg is integrally formed with the tie bar.

16. An auger flight support as defined in claim 14, wherein said tie bar includes a downwardly depending leg mounting block disposed approximately midway along the length of said tie bar and said support leg is secured to said mounting block.

17. An auger flight support as defined in claim 16, wherein said support leg is removably secured to said mounting block.

18. An auger flight support as defined in claim 14, wherein said support leg is disposed on said tie bar at such a position that allows said support leg to be disposed at substantially the center of gravity of the parallel augers.

19. An auger flight support as defined in claim 14, wherein said support leg further includes a foot plate and the foot plate is adapted to contact the surface of the ground between the augers.

20. An auger flight support as defined in claim 19, wherein the width of the foot plate is greater than the width of the support leg.

21. An auger flight support as defined in claim 14, wherein said support leg is shorter in length than the diameter of the auger flights.

22. An auger flight support as defined in claim 21, wherein said support leg is substantially parallel in an assembled position to the augers